

ABSTRACT OF THE DISCLOSURE

Methods and systems for performing network port authentication without requiring any operating system (OS) complicity are disclosed. Under one method, port authentication instructions are loaded into a protected memory space during a pre-boot of a supplicant system. In response to a port authentication request, the supplicant system's processor is switched to a hidden execution mode and executes the port authentication instructions to authenticate a network port hosted by an authenticator system to which the supplicant system is linked. One authentication process employs an authentication server that authenticates the supplicant via one of various authentication schemes, including an access challenge. Port authentication may also be performed via an out-of-band base management controller that operates independently from an operating system running on the supplicant.